

### REMARKS

In the last Office Action, claims 1-3 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,805,421 to Kamlukin et al. ("Kamlukin"). Claim 4 was objected to as being dependent upon a rejected base claim and was otherwise indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Acknowledgement was made of applicant's claim for foreign priority under 35 U.S.C. §119 as well as receipt of the three priority documents thereby perfecting the claim for foreign priority.

No objection was made to the drawings and, therefore, it is applicant's understanding that the drawings filed with the application are acceptable.

In accordance with this response, the specification has been amended in editorial respects to correct obvious informalities and to provide literal antecedence for the amended claim terminology. Independent claim 1 together with dependent claim 2 have been amended, and allowable dependent claim 4 has been rewritten in independent form to incorporate the subject matter of base claim 1, thereby placing claim 4 in allowable form. New claim 5 has been added which is similar to original claim 4 and which depends on amended base claim 1.

Applicant respectfully requests reconsideration of his application in light of the foregoing amendments and the following discussion.

The present invention pertains to a snow removal machine having a novel blower construction for efficiently and reliably throwing-up or discharging snow through a chute even when the snow contains stones or other foreign matter that tend to lodge between the blower blades and the blower housing. As shown in the embodiment of Figs. 1-5, the blower 40 comprises a plurality of supporting members 55 having inclined distal end portions 68 and a plurality of resilient elastically deformable throwing-up blades 56 attached at their proximal end portions to respective ones of the supporting members 55 in the vicinity of the inclined distal end portions 68 of the supporting members 55. As shown in Figs. 2-3, the inclined distal end portions 68 of the supporting members 55 and the corresponding blade bodies 72 of the throwing-up blades 56 define therebetween generally triangular spaces which allow the throwing-up blades 56 to undergo bending about the proximal end portions thereof while keeping the blade bodies 72 free from deformation until they contact the inclined distal end portions 68 of the support members 55. This is shown, for example, in Figs. 5A-5D.

Figs. 6-8 show another embodiment of a blower 90 in which the inclined distal end portion 96 of each supporting member 91 is formed in a downward slope from a rear side edge to a front side edge, or vice versa, so that after the blade body of each throwing-up blade comes into contact with the inclined distal end portion 96 of the corresponding support member 91, the front or rear side edge of the blade body is elastically deformed in a twisted state about the downward slope of the inclined distal end portion 96 in the direction opposite to direction of rotation of the blower. The twisted state of the front or rear side edge of the blade body is shown, for example, in Fig. 9(d).

Amended independent claim 1 clearly patentably distinguishes over Kamlukin. Claim 1 recites that the blower has supporting members having distal end portions inclined in a direction opposite to a direction of rotation of the blower, that the resiliently deformable throwing-up blades have proximal end portions attached to the respective supporting members in the vicinity of the inclined distal end portions thereof and blade bodies extending radially outward from the respective proximal end portions, and that each of the inclined distal end portions of the supporting members and a corresponding one of the blade bodies of the throwing-up blades define therebetween a generally triangular space so as

to allow the throwing-up blade to undergo bending about the proximal end portion thereof while keeping the blade body free deformation until the blade body comes into contact with the inclined distal end portion of the supporting member. No similar structure is disclosed by Kamlukin.

Kamlukin discloses a snow blower having a paddle wheel impeller 15. The impeller 15 has blades 16 of rubber-like material and rigid backing members 23 disposed behind the respective blades 16 and curving rearwardly away from the rear faces of the blades 16. As shown by a dash-and-dot line in Fig. 2, when the body of each blade 16 is subjected to an undue load, such as a stone becoming wedged between the blade and a wall of the blower chamber 14, the major part of the blade is free to flex rearwardly. Stated otherwise, the blade 16 elastically deforms until it assumes a rearwardly curved configuration corresponding to that of the curved outer portion 26 of the rigid backing member 23. When the blade 16 becomes elastically deformed in this manner, its ability to carry and throw up snow into the chute becomes impaired.

Independent claim 1 requires that each of the inclined distal end portions of the supporting members and a corresponding one of the blade bodies of the throwing-up blades define therebetween a generally triangular space so as to allow the throwing-up blade to undergo bending about the

proximal end portion thereof while keeping the blade body free from deformation until the blade body comes into contact with the inclined distal end portion of the supporting member. No such structure is disclosed by Kamlukin. In Kamlukin, the blade bodies of the elastically deformable throwing-up blades 16 undergo deformation throughout their length (see Fig. 2) and thus are not free from deformation until the blade body comes into contact with the inclined distal end portion of the supporting member 23, as required by claim 1.

Moreover, it clearly would not have been obvious to one ordinarily skilled in the art to modify Kamlukin to arrive at the claimed invention. As stated in Kamlukin, a feature of the Kamlukin invention is forming the blades 16 of resiliently flexible material (column 3, lines 55-58) and providing the supporting members 23 with a radially outer portion 26 that curves rearwardly away from the normal plane of the rear face of the blade 16 for performing the "very important function of controlling the flexing of the blade" (column 4, lines 6-13). The curved radially outer portion 26 of the supporting members 23 has a radius of curvature large enough to insure that no portion of the blade material would be stressed excessively when the blade is flexed to the maximum extent "that the backing member permits" (column 4, lines 33-46). Thus the flexibility of the throwing-up blades 16 in conjunction with

the curvature of the supporting members 23 are indispensable in Kamlukin. The throwing-up blades 16 are purposefully designed to undergo elastic deformation throughout their length and hence, one skilled in the art would not have found it obvious to modify Kamlukin to prevent the blade bodies from undergoing deformation, in the manner recited in claim 1.

Claims 2-3 and 5 depend on claim 1 and thus likewise patentably distinguish over Kamlukin. In addition, Kamlukin does not disclose throwing-up blades that are elastically deformable in a twisted state, as required by claim 3, and does not disclose openings in the supporting members 23, as required by claim 5.

Objected to claim 4 has been rewritten in independent form thereby placing this claim in allowable form.

In view of the foregoing, the application is now believed to be in allowable form. Accordingly favorable reconsideration and passage of the application to issue are respectfully requested.

Respectfully submitted,

ADAMS & WILKS  
Attorneys for Applicant

By: 

Bruce L. Adams  
Reg. No. 25,386

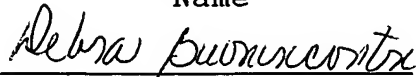
17 Battery Place  
Suite 1231  
New York, NY 10004  
(212) 809-3700

MAILING CERTIFICATE

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: MS FEE AMENDMENT, COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Debra Buonincontri

Name



Signature

August 15, 2005

Date